

Response to Arguments

1. Applicant's arguments, see REMARKS, filed June 20, 2011, and Examiner's Amendment below, with respect to claims 29, 33, 37, 41, 43 and 46 have been fully considered and are persuasive. The U.S.C. 103 (a) rejection of claims 29, 33, 37, 41, 43 and 46 has been withdrawn.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on May 5, 2011 has been considered by the Examiner and made of record in the application file.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles Eggers on September 1, 2011.

The application has been amended as follows:

Claim 37. (Currently Amended) A non-transitory computer readable medium ~~media~~ comprising instructions for implementing ~~embodying~~ a method, comprising:

detecting an unbalanced quality of power control signals from a wireless device simultaneously received at a plurality of base station transceivers involved in a soft handoff, wherein the unbalanced quality is determined based on qualities of power control signals from each of the plurality of base station transceivers involved in the soft handoff;

increasing a target signal-to-noise ratio (SNR) of a reverse link pilot channel carrying at least one of the power control signals for at least one of the plurality of base station transceivers when the quality of the at least one of the power control signals for the at least one of the plurality of base station transceivers is below a predefined target signal quality;

increasing a pilot channel transmit power level of the pilot channel transmitted by the wireless device during the soft handoff in response to the at least one of the plurality of base station transceivers; and

decreasing a power gain of other channels transmitted by the wireless device in relation to the increased transmit power level of the pilot channel of the wireless device during the soft handoff, wherein the power gain of other channels in relation to the pilot channel is decreased by an amount that is more than an amount by which the pilot channel transmit power level is increased.

Claim 41. (Currently Amended) A method, comprising:

receiving a first forward link power control signal from a wireless device by a first base station transceiver involved in a soft handoff, wherein the first forward link power control signal is communicated over a first reverse link power control sub-channel of a first reverse link from the wireless device to the first base station transceiver;

receiving a second forward link power control signal from the wireless device by a second base station transceiver involved in the soft handoff, wherein the second forward link power control signal is communicated over a second reverse link power control sub-channel of a second reverse link from the wireless device to the second base station transceiver, wherein the first and second forward link power control signals are transmitted by the wireless device simultaneously; and

increasing a target signal-to-noise ratio (SNR) of the first reverse link power control sub-channel when the detected quality of the first forward link power control signal is below a predefined target signal quality, ~~wherein the target signal-to-noise ratio of the first reverse link power control sub-channel is increased by decreasing a target frame error rate associated with the first reverse link or is increased based on a bit error rate of the first forward link power control signal;~~

detecting an unbalanced quality of the first and second forward link power control signals;

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increasing a transmit power level of the first reverse link power control sub-channel in response to a command from the first base station transceiver to the wireless device;

and decreasing a power gain of other channels transmitted by the wireless device in relation to the increased transmit power level of the first reverse link power control sub-channel,

wherein the power gain of other channels in relation to the first reverse link power control sub-channel is decreased by an amount that is more than an amount by which the first reverse link power control sub-channel transmit power level is increased.

Claim 45. (Canceled)

Claim 46. (Currently Amended) The method of claim 41-45, wherein the power gain of other channels in relation to the first reverse link power control sub-channel is decreased by an amount that is equal to an amount by which the first reverse link power control sub-channel transmit power level is increased.

Claim 47. (Canceled)

Allowable Subject Matter

4. **Claims 29, 33, 37, 41, 43 and 46** are allowed, and are renumbered claims 1-6, respectively.

5. The following is an examiner's statement of reasons for allowance:

Consider **claims 29, 33, 37 and 41**, the most relevant prior art of record, the combination of Chheda et al. (US 6,515,975 B1) and Nanda et al. (US 6,571,104 B1), in view of Moon (US 6,567,391 B1), and in further view of Kong et al. (US 6,473,619 B1), fails to specifically show, disclose, or suggest wherein the power gain of other **channels transmitted by the wireless device** in relation to the **pilot channel transmitted by the wireless device** is decreased by an amount that is more than an amount by which the pilot channel transmit power level is increased.

Chheda et al. clearly show and disclose a method comprising: detecting an unbalanced quality of power control signals from a wireless device simultaneously received at a plurality of base station transceivers involved in a soft handover, wherein the unbalanced quality is determined based on qualities of power control signals from each of the plurality of base station transceivers involved in the soft handoff (BTS sending forward link signals to MS and receiving power control channel signals; each of the BTSs sends the bit energy to noise density estimate and current transmit power to a central location such as BSC; if any output powers incremental difference are found to exceed a predetermined threshold, these BTSs are instructed to use power output of the BTS(x) (the best) [col. 1 lines 15-28, col. 2 lines 37-53, col. 4 line 60- col. 5 line 33]).

Nanda et al. clearly show and disclose increasing a target signal-to-noise ratio (SNR) of a reverse link pilot channel carrying at least one of the power control signals for at least one of the plurality of base station transceivers when the quality of the at least one of the power control signals for the at least one of the plurality of base station transceivers is below a predefined target signal quality (If effective $E_{sub.b}/N_{sub.0}$ is smaller than model targeted $E_{sub.b}/N_{sub.0}$, targeted $E_{sub.b}/N_{sub.0}$ is increased by one up step size; When $p_{cg} E_{sub.b}/N_{sub.0}$ 490 is smaller than targeted $E_{sub.b}/N_{sub.0}$, mobile terminal sends a power-control bit on reverse link indicating that base station should increase the power of forward link [fig. 4, col. 8 line 35- col. 9 line 15]).

Moon clearly shows and discloses increasing a pilot channel transmit power level of the pilot channel transmitted by the wireless device during a handoff in response to the at least one of the plurality of base station transceivers (mobile station increases transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]); and decreasing a power gain of other channels transmitted by the wireless device in relation to the increased transmit power level of the pilot channel of the wireless device during the handoff (total transmission power is not changed; with some traffic channels decreasing transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]).

Kong et al. clearly show and disclose the power gain other channels in relation to a pilot channel is decreased by an amount that is more than an amount by which a pilot channel transmit power level is increased (the serving base station increases transmission power of forward pilot channels and lowers transmission power of the

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other channels much more than the pilot transmission power decrement to decrease total forward transmission power [col. 4 line 62- col. 5 line 3, col. 6 lines 20-33]).

Chheda et al. and Nanda et al., in view of Moon, and in further view of Kong et al., however, lack the claimed feature decreasing a power gain of other channels transmitted by the wireless device in relation to the increased transmit power level of the pilot channel of the wireless device during the soft handoff, wherein the power gain of other channels in relation to the pilot channel is decreased by an amount that is more than an amount by which the pilot channel transmit power level is increased, therefore this limitation, in conjunction with the other limitations recited in amended claims 29, 33, 37 and 41, is novel and unobvious over of the combination Chheda et al., Nanda et al., Moon, and Kong et al.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAIME HOLLIDAY whose telephone number is (571)272-8618. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jaime M Holliday/
Examiner, Art Unit 2617

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